AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below:

1. (Cancelled)

2. (Withdrawn) A motor as recited in claim 1, wherein:

said radial wave actuating means comprising a centrally located, rotatably mounted, elliptical ring having an outer boundary surface, a plurality of pistons, each having a piston cylinder and a rod extending from said cylinder, said pistons located proximate said spline outer surface and oriented so that said rods are radially aligned with respect to said central axis, each of said rods having an end that contacts a point on said ring outer surface,

wherein said pistons are sequentially operable so that the action of said rod ends on said ring causes said ring to rotate about its central axis in such a manner that at least one of said deformed flexspline teeth engages at a point the toothed side of said circular spline in such a manner that said engagement point passes as a wave around the inner perimeter of said circular spine, said movement of said engagement point causing said flexspline to rotate around said central axis.

3. (Withdrawn) A motor as recited in claim 2 wherein the teeth of said spline and flexspline are configured so that the angular distance of said flexspline rotation for a single revolution of said ring is a function of the difference in said specified number of teeth in said flexspline and spline.

4. (Withdrawn) A motor as recited in claim 3 further comprising:

an annular bearing having an inner and an outer race, wherein said inner race is proximate said ring outer surface and said outer race is proximate said flexspline inner surface, and

wherein, with said bearing so situated, said piston rod ends are contacting points on said bearing outer race.

5. (Withdrawn) A motor as recited in claim 1, wherein:

said radial wave actuating means comprising a centrally located platform having a center point and an outer boundary surface, a flexible ring surrounding said platform, said ring having an inner and an outer surface, said ring coaxially aligned with said platform center point, a

plurality of force applying means, each having a fluid containing diaphragm and a force applying diaphragm surface, each of said means located in a spaced-out relationship around the perimeter of said platform and oriented so that said force applying diaphragm surface is radially aligned with respect to said platform center point, each of said force applying diaphragm surfaces contacting a point on said flexible ring inner surface.

6. (Withdrawn) A motor as recited in claim 5 wherein the teeth of said spline and flexspline are configured so that the angular distance of said flexspline rotation for a single cycle of the sequential operation of said force applying means is a function of the difference in said specified number of teeth in said flexspline and spline.

7. (Withdrawn) A motor as recited in claim 1, wherein:

said radial wave actuating means comprising a centrally located fluid containing, flexible, wave generator ring having a center point and an outer boundary surface, wherein said ring capable of being deformed by the movement of said contained fluid so that ring boundary surface takes the form of an ellipse having a major and a minor axis, with said axis being capable of being caused to rotate around said ring center point by specified movement of said contained fluid,

wherein said wave generator ring being deformed by specified motion of contained fluid so that a portion of its outer, boundary surface contacts the inner surface of said flexspline so as to cause said flexspline to deform in such a manner that at least one of said deformed flexspline teeth engages at a point the toothed side of said circular spline in such a manner that said engagement point passes as a wave around the inner perimeter of said circular spine, said movement of said engagement point causing said flexspline to rotate around said ring center point.

8. (Withdrawn) A motor as recited in claim 7 wherein the teeth of said spline and flexspline are configured so that the angular distance of said flexspline rotation for a single cycle of the rotation of said ellipse of said wave generator ring is a function of the difference in said specified number of teeth in said flexspline and spline.

9. (Withdrawn) A motor as recited in claim 7 wherein said wave generator ring having an inner membrane, a plurality of spaced-apart, deformable lobes attached to said membrane, a plurality

of inflatable cylinders oriented so that one of said cylinders lies between each of said spaced-apart lobes, wherein each of said lobes having a distal surface and wherein said distal surfaces configured so as to generally form a segmented, circular, cylindrical, boundary surface that is proximate said flexspline inner surface.

10. (Withdrawn) A motor as recited in claim 9 further comprising a plurality of fluid conduits that connect the pairs of adjoining, inflatable cylinders that are located on the opposite sides of said segmented, circular, cylindrical, boundary surface so that said connected cylinders can be simultaneously inflated so as to cause an increase in the distance that separates the segments of said boundary surface of said adjoining lobes.

11. (Withdrawn) A motor as recited in claim 10 further comprising a pump for sequentially inflating said pairs of adjoining, inflatable cylinders.

12. (Currently Amended) A motor ~~as recited in claim 1,~~ comprising:

a means for actuating a radial wave, said means having an outer boundary surface that exhibits the actions of said radial wave, said means also having a central axis from which said radial wave action is directed,

a deformable flexspline having an inner surface and a toothed outer surface, said flexspline coaxially aligned with the central axis of said means and oriented such that flexspline inner surface is proximate the outer boundary surface of said means, said flexspline toothed outer surface having a first specified number of teeth,

a circular spline having a toothed inner surface, said spline having an outer boundary surface and being coaxially aligned with said central axis and oriented such that said spline toothed inner surface is proximate the toothed outer surface of said flexspline, said spline inner surface having a second specified number of teeth which is different than said first specified number of teeth in said flexspline, and

wherein said radial wave actuating means including ~~comprising~~ a central ring having an outer, boundary surface and a center point, a plurality of diaphragm pistons, each having a fluid containing cavity, a diaphragm that covers said cavity and a top action surface, said pistons being mounted along the perimeter of said ring boundary surface so that said action surfaces move radially from said ring center point as the amount of fluid in said cavities is increased, a planetary gear having an inner surface and a toothed outer surface with a first specified number of teeth, said planetary gear having a center point that coincides with said ring center point, a wave generator gear having an outer surface and a toothed inner surface and oriented such that said wave generator toothed inner surface is proximate the toothed outer surface of said planetary gear, said wave generator gear having a second, specified number of teeth which is different than said first specified number of teeth in said planetary gear, and a ring bearing having an outer surface and an inner surface, said bearing inner surface being proximate said wave generator gear outer surface.

13. (Currently Amended) A motor as recited in claim 12 wherein, by a specified flow of fluid through said pistons, the outer boundary surface of said planetary gear is ~~so configured so as to be~~ caused to move relative to said ring center point so that a portion of said planetary gear outer surface contacts the inner surface of said wave generator gear in such a manner that at least one

of said planetary gear teeth engages at a point the toothed side of said wave generator gear in such a manner that said engagement point passes as a wave around the inner perimeter of said wave generator gear, said movement of said engagement point causing said wave generator gear to rotate around said ring center point.

14. (Original) A motor as recited in claim 13 wherein said flexspline and spline so configured so that rotational motion of said wave generator gear causes said flexspline to deform in such a manner that at least one of said deformed flexspline teeth engages at a point the toothed side of said circular spline in such a manner that said engagement point passes as a wave around the inner perimeter of said circular spine, said movement of said engagement point causing said flexspline to rotate around said ring center point.

15. (Withdrawn) A rotary motor comprising:

a central ring having an outer, boundary surface and a center point,

a plurality of diaphragm pistons, each having a fluid containing cavity, a diaphragm that covers said cavity and a top action surface, said pistons being mounted along the perimeter of said ring boundary surface and configured so that said action surfaces move radially from said ring center point as the amount of fluid in said cavities is increased,

a planetary gear having an inner surface and a toothed outer surface with a first specified number of teeth, said planetary gear having a center point that coincides with said ring center point,

an inner gear having an outer surface and a toothed inner surface and oriented such that said inner gear toothed inner surface is proximate the toothed outer surface of said planetary gear, said inner gear having a second, specified number of teeth which is different than said first specified number of teeth in said planetary gear,

a ring bearing having an outer surface and an inner surface, said bearing inner surface being proximate said inner gear outer surface,

wherein by a specified flow of fluid through said pistons the outer boundary surface of said planetary gear is caused to move relative to said ring center point so that a portion of said planetary gear outer surface contacts the inner surface of said inner gear in such a manner that at least one of said planetary gear teeth engages at a point the toothed side of said inner gear in such

a manner that said engagement point passes as a wave around the inner perimeter of said inner gear, said movement of said engagement point causing said inner gear to rotate around said ring center point.

16. (Cancelled)

17. (Currently Amended) A method ~~as recited in claim 16,~~ of providing a rotary motor, said method comprising the steps of:

utilizing a means for actuating a radial wave, said means having an outer boundary surface that exhibits the actions of said radial wave, said means also having a central axis from which said radial wave action is directed,

utilizing a deformable flexspline having an inner surface and a toothed outer surface, said flexspline coaxially aligned with the central axis of said means and oriented such that flexspline inner surface is proximate the outer boundary surface of said means, said flexspline toothed outer surface having a first specified number of teeth,

utilizing a circular spline having a toothed inner surface, said spline having an outer boundary surface and being coaxially aligned with said central axis and oriented such that said spline toothed inner surface is proximate the toothed outer surface of said flexspline, said spline inner surface having a second specified number of teeth,

wherein said means is operable so that the action of said radial wave causes at least one of said deformed flexspline teeth to engage at a point the toothed side of said circular spline in such a manner that said engagement point passes as a wave around the inner perimeter of said circular spine, said movement of said engagement point causing said flexspline to rotate around said central axis, and

wherein said step of utilizing a radial wave actuating means further includes the steps of utilizing: ~~comprising~~ a central ring having an outer, boundary surface and a center point, a plurality of diaphragm pistons, each having a fluid containing cavity, a diaphragm that covers said cavity and a top action surface, said pistons being mounted along the perimeter of said ring boundary surface so that said action surfaces move radially from said ring center point as the amount of fluid in said cavities is increased, a planetary gear having an inner surface and a toothed outer surface with a first specified number of teeth, said planetary gear having a center

point that coincides with said ring center point, a wave generator gear having an outer surface and a toothed inner surface and oriented such that said wave generator toothed inner surface is proximate the toothed outer surface of said planetary gear, said wave generator gear having a second, specified number of teeth which is different than said first specified number of teeth in said planetary gear, and a ring bearing having an outer surface and an inner surface, said bearing inner surface being proximate said wave generator gear outer surface.